

Notice of Allowability	Application No.	Applicant(s)	
	09/812,720	MELLENBAMP, MARK W.	
	Examiner	Art Unit	
	Shanon Foley	1648	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to October 30, 2003 and January 13, 2004.
2. ☒ The allowed claim(s) is/are 1-6,8,10,12-15,17-22,27,28,32-35,37,39,41-45,48 and 49.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>October 30, 2003</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

A primary reason for the indication of allowance in this application is that the equine abortion virus of Studdert (US 5,084,271) is not the instantly claimed KyA EHV-1 attenuated strain.

It is noted that Matsumura et al. demonstrate that the live KyA strain, that has been passaged in murine L-M fibroblasts since 1962, is safe for horses and is sufficiently attenuated to protect foals and young horses from severe manifestations of EHV-1 infection, see section 2.1 on page 354 and Figure 1 on page 357. There is no motivation to inactivate an already sufficiently attenuated EHV-1 KyA, especially since it is well known that inactivation alters the antigenic profile of a pathogen.

The attenuated EHV-1 KyA strain of Matsumura et al. is not as effective as the instant inactivated EHV-1 KyA strain claimed. Matsumura et al. teach that humoral antibody responses were undetectable in horses that had no previous exposure to equine herpesviruses upon administration of attenuated EHV-1 KyA. Also, Matsumura et al. only observe a weak antibody response in horses that had been previously exposed to an equine herpesvirus upon administration of the attenuated EHV-1 KyA strain, see section 3.4 on page 360, Tables 4 and 5 and the second paragraph on page 363. In contrast, the instant working examples demonstrate that the inactivated EHV-1 KyA induces antibody responses that were not observed by Matsumura et al., see paragraph 83 on pages 26-27, paragraphs 91-93 on page 30, paragraph 101 on pages 33 and 34 and paragraphs 115-117 on pages 39-40. As pointed out by applicant, Zhang et al. teach that lower levels of protection were observed in the non-replicating antigens.

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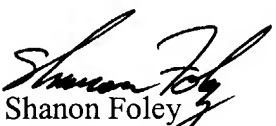
Therefore, the induction of the humoral response observed in the instant working examples that were not observed by Matsumura et al. are unexpected.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shanon Foley whose telephone number is (571) 272-0898. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on (571) 272-0902. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Shanon Foley
Patent Examiner, 1600